

**INITIAL STATEMENT OF REASONS
FOR
PROPOSED BUILDING STANDARDS
OF THE
CALIFORNIA BUILDING STANDARDS COMMISSION (CBSC)**

**REGARDING THE ADOPTION OF THE 2015 UNIFORM MECHANICAL CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 4**

AMEND 2015 UNIFORM MECHANICAL CODE (UMC)

[Note to agencies: Directions below which, like this note, are not intended to be shown in your submittal, have been updated to reflect requirements of AB 1711 (Chapter 779, Statutes of 2014) effective January 1, 2015. New directions are shown in underline.]

The Administrative Procedure Act (APA) requires that an Initial Statement of Reasons be available to the public upon request when rulemaking action is being undertaken. The following information required by the APA pertains to this particular rulemaking action:

STATEMENT OF SPECIFIC PURPOSE, PROBLEM, RATIONALE and BENEFITS:

This proposed action by the CBSC adopts the most current edition of the UMC of the International Association of Plumbing and Mechanical Officials, (IAPMO) with existing amendments and new amendments shown below. These proposed regulations will make effective the latest edition of the UMC for state owned buildings, including buildings constructed by the Trustees of the California State University and buildings constructed by the Regents of the University of California that are permitted under the next triennial edition of the California Mechanical Code (CMC). Further, California law makes the UMC standards adopted by the Commission applicable to all occupancies. Each triennial edition of the California Code of Regulations (CCR) becomes effective 180 days after its publication and is effective at the time an application for a building permit is submitted. The adoption of the 2015 UMC will make applicable the most recent edition for use by individuals, businesses and state agencies as mandated by the Health & Safety Code (H&SC), Section 18928.

New and existing amendments: (Item numbers used to coordinate with the items listed in the Express Terms)

ITEM 1 – PREFACE, ACKNOWLEDGEMENTS & Legends of Abbreviations of Adopting State Agencies.

Agency Statement: BSC proposes to update the number of parts of the building standards code as identified in law as Title 24. Additionally update the model mechanical code edition being proposed for adoption in the 2015 Triennial Code Adoption Cycle. Lastly, update the list of Commissioners to reflect the current membership of the Commission and clarify the legend of abbreviations to include **[BSC-CG]** in response to AB 341.

Specific Purpose:

With the addition of Part 2.5 California Residential Code during the last Triennial cycle, the total number of codes included in the Title 24 standards increased from 12 parts to 13 parts, therefore BSC is proposing to change the preface to reflect the actual number of codes included in Title 24.

Additionally, BSC is proposing to change the referenced edition of the model code from the 2012 edition of the UMC to the 2015 edition of the UMC as well as updating the names of the Commissioners currently serving on the Building Standards Commission.

Lastly, BSC is proposing a new acronym, **BSC-CG** (California Building Standards Commission – CALGreen) to help the code user to identify green building standards provisions that are contained in the green code and may be related to the mechanical provisions contained in the mechanical code.

Rationale:

The California Building Standards Commission is the state agency with the responsibility for maintaining the format of the published codes. These changes will provide a more accurate accounting of the parts of code available through Title 24, California Code of Regulations (CCR), as well as updating the edition of the model code references required to meet Building Standards Law regarding the adoption of the most recent edition of model code within one year of the model code publication.

Benefit:

Changing these references will clarify the codes that are available for construction and maintain the most current building standards for the protection of public health and welfare in the built environment. Additionally, updating the current sitting members of the Commission allows the public to be aware of the person responsible for the adoption and publication of the building standards codes.

ITEM 2 – CHAPTER 1 – CALIFORNIA ADMINISTRATION, DIVISION I

Agency Statement:

Similar to Item #1 BSC proposes to update the general title statement regarding the number of parts of the building standards code as identified in law as Title 24. Additionally BSC proposes to update the model mechanical code edition being considered for adoption in the 2015 Triennial Code Adoption Cycle.

Additionally, BSC is proposing to change the following sections;

- References for various state agencies to reserved sections found later in Chapter 1.
- Updates to **Section 1.1.3.2 (7 & 8)** to change “*apartment houses*” to “*apartments*”, add the word “*new*” to “*Common-use*”, change the word “*spaces*” to “*areas*” and add the word “*new*” after the word “*serving*” in respond to a request by The Housing and Community Development agency (HCD).
- Added an Exception for detached one-and two-family dwellings to **Section 1.1.7.3** in respond to a request by The Housing and Community Development agency (HCD).
- Updated the street address in **Section 1.1.8.1** in respond to a request by The Housing and Community Development agency (HCD).
- Added a new **Section 1.1.8.2 Locally adopted energy standards – California Energy Code, Part 6** to clarify the required steps for local jurisdictions when proposing amendments to the California Energy Code, Part 6, Title 24.
- Update to correct the reference to *Health and Safety Code Section 18942* within **Section 1.1.10 Availability of codes**.
- Addition of an acronym **BSC** In **Section 1.2.1** was included due to new scope and authority provisions for the Building Standards Commission regarding the development of green building standards in response to AB 341. Another acronym is being proposed for BSC called **BSC-CG**. This acronym is intended to identify provisions in the mechanical code that have related green standards contained within the CALGreen code.
- The **Application** provisions in **Section 1.2.2 (4)** are being updated to reflect the adoption of the entire International Existing Building Code (IEBC)
- Due to legislation the Department of Water Resources authority for graywater systems was removed and given to the BSC therefore BSC proposes to remove the DWR application provision for graywater systems.

1.1.0 General

1.1.1 Title.

1.1.3.2 State-Regulated Buildings, Structures, and Applications.

1.1.7.3 Conflicts. (Exception)

1.1.8.1 Findings and filings.

1.1.8.2 Locally adopted energy standards.

1.1.10 Availability of codes.

1.2.1 BSC.

1.2.2 Alternate Materials and Methods of Construction Equivalency.

1.2.2.1 State building.

1.2.2.2 Enforcement.

1.2.2.3 Enforcement, Reserved for DGS.

1.2.2.4 Adopting agency identification.

1.2.3 BSC-CG.

1.2.2.3.1 Research Reports.

1.2.2.3.2 Tests.

1.13.0 Department of Water Resources (DWR).

Section 1.1.0 General and 1.1.1 Title:

Specific Purpose:

With the addition of Part 2.5 California Residential Code during the last Triennial cycle, the total number of codes included in the Title 24 standards increased from 12 parts to 13 parts, therefore BSC is proposing to change the preface to reflect the actual number of codes included in Title 24.

Rationale:

The California Building Standards Commission is the state agency with the responsibility for maintaining the format of the published codes. This change will provide a more accurate accounting of the parts of code available through Title 24, California Code of Regulations (CCR). Also updating the edition of the model code referenced is required to meet Building Standards Law regarding the adoption of the most recent edition of model code within one year of the model code publication.

Benefit:

Changing these references will clarify the codes available for use for construction and maintain the most current building standards for the protection of public health and welfare in the built environment.

Section 1.1.3.2 State-Regulated Buildings, Structures, and Applications:

Specific Purpose:

An important part of the code development process is producing a code that avoids circular references. The wording of the amendment gave the reader the impression that there were additional provisions related to the listed state agency located in the referenced section. However when checked the reference simply stated that the section was "Reserved". By rewording the section we have eliminated the circular reference.

Rationale:

The California Building Standards Commission is the state agency with the responsibility for maintaining the format of the published codes. This change will provide a more accurate referencing format within Title 24.

Benefit:

Changing these references will reduce the frustration the code user may have when checking references that appears to be contain additional information only to find that the reference was to a "Reserved" section where no additional requirements can be acquired.

Section 1.1.7.3 Conflicts (Exception):

Specific Purpose:

The exception to this section was proposed by the Department of Housing and Community Development (HCD) for addition to the “Conflicts” section of the CMC to identify specific occupancy classifications that are constructed in accordance with the CBC are not required to comply with the California Residential Code also.

Rationale:

Helps to delineate the application of the building code and/or residential code to residential construction and avoids conflicts and duplication in code provisions.

Benefit:

More clearly identified the application of code standards.

Section 1.1.8.1 Findings and filings:

Specific Purpose:

Update the HCD street address.

Rationale:

Maintain accuracy for the code user.

Benefit:

Assists the public to be able to correspond with HCD by maintaining an accurate street address.

Section 1.1.8.2 Locally adopted energy standards:

Specific Purpose:

The CBSC is the state agency responsible for local ordinance filing to modify, in a more restrictive manner, building standards for local application. As required in law, and to provide the local jurisdiction the ability to further amend the building standards for use within their jurisdictional authority, the local jurisdiction can propose to modify the building standards as needed. Additionally, energy provisions promulgated by the California Energy Commission may be modified as well. Upon a local jurisdiction energy standard modification that jurisdiction is required to file any changes to the energy standards with the Energy Commission and to obtain a letter of approval for the modification to the energy code. The documentation received from the Energy Commission is also required to be forwarded to the CBSC to be included within their jurisdictions filed ordinance.

Rationale:

To comply with applicable provisions of the Public Resources Code and applicable provisions of California Administrative Code, Chapter 10, Part 1 of Title 24, California Code of Regulations.

Benefit:

Creates better instruction for the filing jurisdiction use in their ordinance adoption and filing process to ensure compliance with state law.

Section 1.1.10 Availability of codes:

Specific Purpose:

Update the code section reference.

Rationale:

The California Building Standards Commission is the state agency with the responsibility for maintaining the format of the published codes. This change will provide a more accurate referencing format within Title 24.

Benefit:

Changing these references will clarify the codes available for use for construction and maintain the most current building standards for the protection of public health and welfare in the built environment.

Section 1.2.1 BSC:

Specific Purpose:

Addition of an acronym **BSC** In **Section 1.2.1** was included for new scope and authority provisions for the Building Standards Commission regarding the development of green building standards in response to AB 341. Additionally, the acronym CSU and UC were added to item #1 to identify locations within the code standards that use these acronym references. Lastly, item #4 is proposed to be changed to reflect the adoption of the International Code Council's International Existing Building Code (IEBC) as the base model code for the 2016 California Existing Building Code.

Rationale:

To comply with applicable provisions of the Health and Safety Code and applicable provisions of California Administrative Code, Chapter 10, Part 1 of Title 24, California Code of Regulations.

Benefit:

Creates better instruction for the filing jurisdiction use in their ordinance adoption and filing process to ensure compliance with state law.

Section 1.2.2.1 State building:

Specific Purpose:

Adding State building definition for this section.

Rationale:

The California Building Standards Commission is the state agency with the responsibility for maintaining the format of the published codes. This change will provide a more accurate referencing format within Title 24.

Benefit:

Provides clarity of application for the code user regarding state buildings.

Section 1.2.2.2 Enforcement:

Specific Purpose:

Adding clarification regarding enforcement for CBSC regulated occupancies by adding definitions to this section.

Rationale:

The California Building Standards Commission is the state agency with the responsibility for maintaining the format of the published codes. This change will provide a more accurate referencing format within Title 24.

Benefit:

Provides clarity of enforcement for the code user regarding state buildings.

Section 1.2.2.3 Enforcement, Reserved for DGS:

Specific Purpose:

This proposal is intended to reserve a section number for future DGS applications.

Rationale:

Maintain accuracy for the code user.

Benefit:

Avoids renumbering of sections during future rulemaking activities addressing DGS applications.

Section 1.2.2.4 Adopting agency identification:

Specific Purpose:

Update to clarify the application of the BSC banner.

Rationale:

Maintain accuracy for the code user.

Benefit:

Provides clarity of enforcement for the code user regarding CBSC's authority.

Section 1.2.3 BSC-CG:

Specific Purpose:

Adding BSC-CG for this section is in response to AB 341 which was legislation that requires the CBSC to add references to other parts of Title 24 that may be impacted by regulations contained in Title 24's Part 11, CALGreen code. This action is being taken to identify the expanded regulatory authority CBSC has over all occupancies that no other agency has authority to regulate and provide green building standards for. Additional to the new section being added for BSC-CG, two existing sections ~~1.2.2.1 and 1.2.2.2~~ have been renumbered to 1.2.3.1 and 1.2.3.2. The remaining text of these sections was not changed.

Rationale:

The addition of the BSC-CG banner will help to clarify the authority the CBSC has for green building standards for occupancies that no other state agency has authority.

Benefit:

Helps the code user more clearly identify green building standards provisions that are required to be included in construction projects throughout the state.

ITEM 3 – CHAPTER 2 – DEFINITIONS

Section 209.0 Galvanized Steel:

Specific Purpose:

Carry forward existing state amendment for the Galvanized Steel definition.

Rationale:

Maintain accuracy for the code user.

Benefit:

Provides clarity of enforcement for the code user regarding CBSC's authority.

ITEM 4. CHAPTER 3 – GENERAL REGULATIONS

Adopt model code chapter

Specific Purpose:

To adopt the model code chapter for use in California for all occupancies.

Rationale:

Adopt per statute the model code provisions for the code user.

Benefit:

This action provides general construction provisions for mechanical systems used throughout the state.

ITEM 5. CHAPTER 4 – VENTILATION AIR

Section 402.1 Occupiable Spaces:

Specific Purpose:

Carry forward existing state amendment for Occupiable Spaces.

Rationale:

Maintain accuracy for the code user.

Benefit:

Maintains consistent language for ventilation requirements.

Table 402.1 Minimum Rates in Breathing Zone:

Specific Purpose:

Addition of a Note following the title for Table 402.1 to make reference to the requirements of the California Energy Commission's energy code.

Rationale:

Maintain accuracy for the code user.

Benefit:

By adding this note to the ventilation requirements within Chapter 4 BSC is providing clarity for the code user.

Section ~~403.9~~ 403.10 Exhaust Ventilations for Enclosed Parking Garages:

Specific Purpose:

Carry forward existing state amendment for Exhaust Ventilation for Enclosed Parking Garages and renumber amendment to work with new model code numbering.

Rationale:

Maintain current state amendment

Benefit:

Adopt per statute the model code provisions for the code user.

Section ~~403.9.1~~ 403.10.1 Alternate Exhaust Ventilation for Enclosed Parking Garages:

Specific Purpose:

Carry forward existing state amendment for Alternate Exhaust Ventilation for Enclosed Parking Garages and renumber amendment to work with new model code numbering.

Rationale:

Maintain current state amendment

Benefit:

Adopt per statute the model code provisions for the code user.

Section ~~403.9.1.1~~ 403.10.1.1 Maximum Exhaust Rate:

Specific Purpose:

Carry forward existing state amendment for Minimum Exhaust Rate and renumber amendment to work with new model code numbering.

Rationale:

Maintain current state amendment

Benefit:

Adopt per statute the model code provisions for the code user.

Section ~~403.9.1.2~~ 403.10.1.2 Exhaust Inlet Distribution:

Specific Purpose:

Carry forward existing state amendment for Exhaust Inlet Distribution and renumber amendment to work with new model code numbering.

Rationale:

Maintain current state amendment

Benefit:

Adopt per statute the model code provisions for the code user.

Section ~~403.9.1.3~~ 403.10.1.3 Exhaust System Operation:

Specific Purpose:

Carry forward existing state amendment for Exhaust System Operation and renumber amendment to work with new model code numbering.

Rationale:

Maintain current state amendment

Benefit:

Adopt per statute the model code provisions for the code user.

ITEM 6. CHAPTER 5 – EXHAUST SYSTEMS

Adopt model code chapter

Specific Purpose:

To adopt the model code chapter for use in California for all occupancies.

Rationale:

Adopt per statute the model code provisions for the code user.

Benefit:

This action provides general construction provisions for Exhaust systems used throughout the state.

Section 503.3 Filters:

Specific Purpose:

As a result of AB 341 being signed into law, BSC is proposing to add references from the mechanical code to CALGreen for provisions directly related to MERV filter ratings and labeling requirements.

Rationale:

To comply with law and to aid the code user in identifying additional provisions located in another part of code within Title 24.

Benefit:

Accuracy in references and connects the codes together for topics that have requirements on more than one part of Title 24.

ITEM 7. CHAPTER 6 – DUCT SYSTEMS

Section 602.1 General.

Specific Purpose:

BSC is proposing to repeal amendments to the above section. These amendments are no longer necessary due to the 2015 Uniform Mechanical Code addressing the SMACNA HVAC Duct Construction Standards–Metal and Flexible.

Rationale:

State agency amendment is no longer needed. Model code picked up the requirements.

Benefit:

Rely on model code language and repeal of state amended language.

ITEM 8. CHAPTERS 7 – COMBUSTION AIR, CHAPTER 8 – CHIMNEY AND VENTS, CHAPTER 9 – INSTALLATION OF SPECIFIC APPLIANCES and CHAPTER 10 – BOILERS AND PRESSURE VESSELS

Adopt model code chapters

Specific Purpose:

To adopt the model code chapters for use in California for all occupancies.

Rationale:

Adopt per statute the model code provisions for the code user.

Benefit:

This action provides general construction provisions for Combustion Air, Chimney Vents, Appliance Installations, and Boilers and Pressure Vessel systems used throughout the state.

ITEM 9. CHAPTER 11 – REFRIGERATION

Adopt model code chapter

Specific Purpose:

To adopt the model code chapter for use in California for all occupancies.

Rationale:

Adopt per statute the model code provisions for the code user.

Benefit:

This action provides general construction provisions for Refrigeration systems used throughout the state.

ITEM 10. CHAPTER 12 – HYDRONICS, CHAPTER 13 – FUEL GAS PIPING and CHAPTER 14 – PROCESS PIPING

Adopt model code chapters

Specific Purpose:

To adopt the model code chapters for use in California for all occupancies.

Rationale:

Adopt per statute the model code provisions for the code user.

Benefit:

This action provides general construction provisions for Hydronics, Fuel Gas Piping, and Process Piping systems used throughout the state.

ITEM 11. CHAPTER 15 – SOLAR SYSTEMS

Adopt model code chapter

Specific Purpose:

To adopt the model code chapter for use in California for all occupancies.

Rationale:

Adopt per statute the model code provisions for the code user.

Benefit:

This action provides general construction provisions for solar systems used throughout the state.

ITEM 12. CHAPTER 16 – STATIONARY POWER PLANTS and CHAPTER 17 – REFERENCED STANDARDS

Adopt model code chapters

Specific Purpose:

To adopt the model code chapters for use in California for all occupancies.

Rationale:

Adopt per statute the model code provisions for the code user.

Benefit:

This action provides general construction provisions for Stationary Power Plants and Referenced Standards used throughout the state.

ITEM 13. APPENDIX CHAPTER A – Residential Plan Examiner Review Form for HVAC System Design

Adopt model code chapters

Specific Purpose:

To adopt the model code appendix chapter for use in California for all occupancies.

Rationale:

Adopt per statute the model code provisions for the code user.

Benefit:

This action provides general construction provisions for HVAC Plans Examiner Form for Residential occupancies used throughout the state.

ITEM 14. APPENDIX CHAPTER B – Procedures to be Followed to Place Gas Equipment in Operation, and APPENDIX CHAPTER C - Installation and Testing of Oil (Liquid) Fuel-Fired Equipment.

Adopt model code chapters

Specific Purpose:

To adopt the model code appendix chapters for use in California for all occupancies.

Rationale:

Adopt per statute the model code provisions for the code user.

Benefit:

This action provides general construction provisions for Placing Gas Equipment in Operation and Installation and Testing of Oil (Liquid) Fuel-Fired Equipment used throughout the state.

ITEM 15. APPENDIX CHAPTER E – Sustainable Practices, APPENDIX CHAPTER F - Sizing of Venting Systems and Outdoor Combustion and Ventilation Opening Design, and APPENDIX CHAPTER G - Example Calculation of Outdoor Air Rate.

Adopt model code chapters

Specific Purpose:

To adopt the model code appendix chapters for use in California for all occupancies.

Rationale:

Adopt per statute the model code provisions for the code user.

Benefit:

This action provides general construction provisions for Sustainable Practices, Sizing of Venting Systems and Outdoor Combustion and Ventilation Opening Design, and Example of Calculating of Outdoor Air Rate used throughout the state.

TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENTS

There were no formal studies or reports used as the bases for the proposed adoption of the Uniform Mechanical Code. The Health & Safety Code, Section 18928, mandates this proposed action.

STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS

There are no mandates for specific technologies or equipment or prescriptive standards that are required.

CONSIDERATION OF REASONABLE ALTERNATIVES

There are no reasonable alternatives identified by the agency. The Health & Safety Code, Section 18928, mandates this proposed action.

REASONABLE ALTERNATIVES THE AGENCY HAS IDENTIFIED THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS

No alternatives were identified to lessen the adverse impact on small businesses. The Health & Safety Code, Section 18928, mandates this proposed action.

FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE IMPACT ON BUSINESS

No facts, evidence, documents, testimony, or other evidence of any significant adverse economic impact on business have been identified. The Health & Safety Code, Section 18928, mandates this proposed action.

ASSESSMENT OF EFFECT OF REGULATIONS UPON JOBS AND BUSINESS EXPANSION, ELIMINATION OR CREATION

The CBSC has assessed whether or not and to what extent this proposal will affect the following:

- ☐ **The creation or elimination of jobs within the State of California.**

These regulations will not affect the creation of or elimination of jobs within the State of California.
- ☐ **The creation of new businesses or the elimination of existing businesses within the State of California.**

These regulations will not affect the creation of or the elimination of existing business within the State of California.
- ☐ **The expansion of businesses currently doing business with the State of California.**

These regulations will not affect the expansion of businesses currently doing business within the State of California
- ☐ **The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment.**

These regulations will not affect the expansion of businesses currently doing business within the State of California

ESTIMATED COST OF COMPLIANCE, ESTIMATED POTENTIAL BENEFITS, AND RELATED ASSUMPTIONS USED FOR BUILDING STANDARDS

CBSC did not identify any costs to comply with the proposed amendments. The amendments provide clarity and regulatory consistency for the code user.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

There are no federal regulations concerning state agency adoption and amendment of model codes. Those provisions are found in H&SC §§18928 and 18929.1.